

8. (Unchanged) The alpha-amylase of claim 1 in the form of a detergent additive which is a non-dusting granulate or a stabilized liquid.

16. (Unchanged) A method for producing the alpha-amylase of claim 1, comprising cultivating an amylase-producing strain of *Bacillus* in a suitable nutrient medium, and recovering the alpha-amylase from the culture medium.

17. (Unchanged) A detergent composition comprising the alpha-amylase of claim 1 and a surfactant.

Q2 18. (Amended) The detergent composition of claim [18] 17 [which] , wherein said composition has a pH of 8.5-11 in aqueous solution[, preferably pH 9-10.5].

19. (Unchanged) The detergent composition of claim 18 which is a laundry detergent.

REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1-19 were pending. In this response, claims 9-15 are cancelled without prejudice as being directed to a non-elected invention and claims 1-5 and 18 are amended for further clarity. Support for the amendments can be found in the specification and claims as originally filed. For example, isolation of α -amylase is described, e.g., at page 4, lines 11-16. The compounds designated STPP and LAS are defined on page 12, line 36 - page 13, line 1. No new matter is added. Accordingly, claims 1-8 and 16-19 are pending and at issue.

The disclosure has been objected to for the recitation of 55°C as an optimum activity. In this response, the specification has been amended appropriately.

Rejection Under 35 U.S.C. § 101

Claims 1-8 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In this response, claims 1-3 have been amended to require an isolated α -amylase. It is respectfully submitted that this rejection has been overcome.

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1, 4, 5, and 18 have been rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness, for: (i) the recitation of "analogue" and "and/or" (claim 1); (ii) the recitation of broad and narrow limitations (claims 4 and 18); (iii) the use of abbreviations and typographical errors (claim 5); and (iv) incorrect dependency (claim 18).

In this response, claims 1, 4, 5, and 18 have been amended to obviate these rejections. It is respectfully submitted that these rejections have been overcome.

Rejections Under 35 U.S.C. §§ 102 and 103

Claims 1-7 and 16 have been rejected under 35 U.S.C. § 102(b) as anticipated by Mitsugi, U.S. Patent No. 4,022,666, or Boyer et al., U.S. Patent No. 4,061,541 or J. Bacteriol. 110:992, 1972. The Examiner contends that Mitsugi et al. discloses a *Bacillus* enzyme having a pH optimum of 9 at 40°C; that the Boyer et al. disclosures teach a *Bacillus* amylase having a pH optimum of 9 at 50°C, and that the present claims encompass these enzymes. Claims 8 and 17-19 have been rejected under 35 U.S.C. § 103(a) as unpatentable over Mitsugi et al. or Boyer et al. The Examiner contends that it would have been obvious to incorporate the presently claimed enzymes into detergent compositions. These rejections are respectfully traversed.

The present inventors have discovered a new class of α -amylases that are distinct from previously known α -amylases in terms of their amino acid sequence and properties.

In bringing these rejections, the Examiner is merely speculating that the presently claimed enzymes are identical to those disclosed in the cited references. To the contrary, it is Applicants' position that the presently claimed enzymes are patentably distinct from the Mitsugi and Boyer enzymes.

It is believed that the claims are in condition for allowance, and a determination to that effect is earnestly solicited.

Respectfully submitted,

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